

Early Childhood Workforce “Data for Impact” Convening: Exploring Partnerships, Strategies, and Opportunities to Build and Strengthen Workforce Data Use

On August 9, 2023, ASPE, in collaboration with NORC at the University of Chicago, held a virtual convening to 1) discuss how states and localities are effectively using data and data systems to address early childhood (EC) workforce issues and 2) how federal agencies can support states, localities, and tribes with technical assistance (TA), resources, and other support. Forty-nine administrators, researchers, and experts from local, state, and federal agencies that focus on EC workforce issues attended the convening. Representatives from five states (Florida, Iowa, Nebraska, Oregon, Virginia) participated as session panelists.

In two panels, states shared strategies for management and use of workforce data. Panels focused on building data infrastructure (Virginia, Florida, and Iowa) and partnerships (Oregon and Nebraska). In facilitated large and small group discussions, participants identified factors that contributed to efforts in operating at scale; challenges that states faced in their efforts and solutions; and what TA, resources, or research states, localities, and tribes need to use workforce data for impact.

Key Takeaways

- Federal and state policy initiatives are key drivers in building statewide early childhood data infrastructure and capacity and can support the sustainability of these efforts.
- Diverse partnerships—among state and local agencies, universities, local foundations, non-profits, early childhood practitioners, and families—are critical for collecting, managing, and sharing data to understand the characteristics and needs of the early childhood workforce.
- State and federal grants that provide funding for at least five years, pooling data sources, and building provider buy-in are helpful solutions for building data infrastructure, coordination, and capacity.
- Efforts to build data infrastructure and capacity need to consider greater alignment of key definitions in early childhood workforce data at the federal and state levels.
- To use “data for impact,” federal support is needed to build technical skills, foster state-to-state collaboration, and support state and local capacity for collaboration and partnership-building.

Background

While the nation is experiencing a critical crisis in its early childhood (EC) workforce, policymakers at all levels need data to make informed policy and program decisions. Data can provide information on wages, credentials, training, supply, and demand at the local and regional level, and

the effectiveness of enhanced compensation on workforce retention.

However, states and localities across the U.S. experience a “data deficit.”¹ Many states lack access to essential data on the size of the EC workforce and basic demographic and workforce characteristics, including credentials, qualifications, and compensation levels. States also lack more detailed data on workforce shortages, stability, and quality. States and localities may also rely on legacy data systems that are difficult to adapt or data may not be integrated across EC and human services. Even states or localities that can access workforce data may not have the capacity or established effective processes to analyze data that addresses key policy questions and use those insights to move from access to impact.

This brief describes key themes that emerged from the Early Childhood Workforce Data for Impact Convening, focused on how states and localities are effectively using data and data systems to address early childhood workforce issues. Key themes include: 1) federal and state policy initiatives as key drivers that support partnerships and use of data for impact; 2) strategies used to facilitate diverse data partnerships; 3) efforts to build data infrastructure and capacity; and 4) improvements to data alignment across systems and partners.² The brief concludes with highlighted opportunities for potential TA and federal support.

1. Policy drivers of data partnerships

Federal and state policy initiatives were key drivers in forming partnerships that facilitate the use of data for impact. Federal funds available through the Preschool Development Grant Birth through Five (PDG B-5) and the American Rescue Plan Act of 2021 (ARPA) enabled the development or expansion of data infrastructure and partnerships.

- The Nebraska Children and Families Foundation used PDG B-5 funds to create EC Community Coordinator roles across the state. These coordinators serve as a network of liaisons to researchers and build infrastructure to support quality and capacity by coordinating local EC birth through five community-based efforts.
- The state of Florida used PDG B-5 funds to support the development of the Sunshine Portal, a centralized, EC integrated data system. ARPA funds

were also used to expand Florida’s data collection efforts to children who were not receiving a child care subsidy. This allowed researchers to map occupancy rates and number of providers across the state to identify shortages and better inform workforce needs.

State-based initiatives have been a driving force in leveraging public-private partnerships to support development and implementation of EC data systems and use of data for impact.

- Virginia established its statewide initiative, Virginia Quality Birth-Five (VQB5) based on a state law enacted in 2020 to create a unified measurement and improvement system, in which all publicly funded child care must participate. The research-policy partnership includes the VA Department of Education, the Virginia Early Childhood Foundation, and researchers at the University of Virginia. Expanded data access through the VQB5 data system has informed state and regional partners on the composition, compensation, and quality of the EC workforce, such as identifying geographic areas with the greatest needs for teacher stipends.
- In Iowa, the Governor called for the convening of a Child Care Task Force in 2021, which yielded recommendations to: 1) improve business capability support to child care providers; 2) create a shared services model across the state; and 3) support child care workforce programs. Through this initiative, the Iowa Department of Health and Human Services, Child Care Bureau contracted with two child care management software vendors to link child care provider data systems to the state’s Child Care Assistance subsidy system.

2. Strategies to facilitate diverse data partnerships

States identified partnerships as critical components of their success in aggregating and using EC workforce data. These partnerships often included a range of organizations (e.g., universities, state and local agencies, foundations, commercial software vendors) that worked together to collect, compile, share, and interpret EC data. A key theme was the need to work with and across all partners (e.g., legislators, policymakers, administrators, researchers). Discussion also emphasized the importance of collaborating directly with EC providers and communities in all aspects of EC workforce data, from the creation of research questions to data sharing and use.

¹ Whitebook, M., McLean, C., Lea J.E. Austin, L.J.E. (April 2018). *The Workforce Data Deficit: Who It Harms and How It Can Be Overcome*. Center for the Study of Child Care Employment, Institute for Research on Labor and Employment, University of California, Berkeley. <https://csce.berkeley.edu/publications/brief/the-workforce-data-deficit/>

² Additional detail about specific state examples described throughout the brief can be found in the [EC Workforce Data Snapshots](#).

SUCCESSFUL STRATEGIES

During the panel presentations, representatives from the five states shared strategies that facilitated their data partnerships and expanded the reach and scale of their efforts.

- All five states actively engaged with partners and providers, either to sustain pre-existing relationships or develop new relationships. In Florida, this involved frequent and open communication across partners, networking with child care providers in the field to get to know them, and sharing data with state administrators.
- By collaborating with partners, Oregon identified priority research questions about the EC workforce and Nebraska developed technical solutions for parents to identify open child care slots during the COVID-19 pandemic. Virginia established common terminology by working directly with EC providers (e.g., family day care providers, business owners, teachers) and developed a common data framework.
- Engagement and collaboration created a shared investment in building or sustaining EC workforce data systems. Florida and Iowa have built out detailed processes for data sharing and use. In Oregon, many pre-existing relationships across state agencies helped create cohesive partnerships and shared ownership of the data, which was an integral component of the Oregon Child Care Research Partnership’s success.

TAKING A COLLABORATIVE APPROACH

States shared that creating and implementing a statewide EC data infrastructure involved taking an inclusive and holistic approach, working at multiple levels and allowing many voices to be heard, including to draw insights beyond findings from administrative data. Through meetings, discussions, and continuous communication, collaborators have worked together to make data-informed decisions regarding the EC workforce.

WORKING WITH COMMUNITY PARTNERS

In addition to having researchers and state and local agencies participate in EC workforce discussions, state panelists emphasized the need to make sure that a diverse set of community members (e.g., families, providers) have an opportunity to voice their opinions. Though this can be challenging, participants expressed that this was an important component for understanding the data and for community buy-in.

- In Nebraska, when communities apply to work with Nebraska Children and Families Foundation’s Communities for Kids (C4K) Initiative, C4K checks for readiness and commitment, along with emphasizing the value of continued engagement. Participants stressed the need to involve community members

while being mindful of the potential power dynamics that could affect conversations.

- Virginia has divided the state into nine Ready Regions, a network of public-private partnerships that supports access to quality early childhood services. Providers and partners in each region create target goals and research questions, while working closely with the Virginia Department of Education and Virginia Early Childhood Foundation.

ENSURING BENEFIT TO PARTNERS

State panelists stressed the importance of ensuring that data collection, interpretation, and use are meaningful to community members and local providers. Communicating with providers is critical since they are significantly affected by state-level changes. Using strategies such as facilitated storytelling and making meaning with engaged partners helps to make data and findings relevant and actionable, as Florida found. In Iowa, child care providers are incentivized to use child care management software that connects state level registry data because the tool and the coaching helps them run their businesses.

3. Data infrastructure and capacity

Panelists discussed effective strategies to build out data infrastructure and capacity, including what might be needed to bridge legacy systems and find new technical solutions. They raised several challenges around accessing workforce data and identified some solutions.

ONE-OFF STUDIES AND LIMITED ACCESS

Participants shared that data is often collected for a singular purpose and then discarded or is accessible only to a small group of people. To mitigate single instances of data collection, a participant noted that Illinois has a system that pools these data sources together on a secure platform, making them accessible to people who want to explore the data.

CROSS-SYSTEM PROVIDER TRACKING

Participants noted that one challenge they faced was linking EC provider data in one data source (e.g., license registry) to other sources (e.g., program information). Some participants noted that they used license numbers as unique identifiers to keep track of providers across data systems.

PROVIDER BUY-IN

Several workforce data systems are voluntary, meaning that EC providers decide whether they share their information with the state. Panelists discussed how using

data can build buy-in from providers; when providers see how data can be used to support their needs and practice, they are more likely to participate in data collection efforts.

TIME, FUNDING, AND SUSTAINABILITY

Linking data across existing systems requires a lot of time and effort; funding is often insufficient to complete work. Panelists recommended that that state and federal grants provide funds for at least 5 years to give ample time for data systems to be linked and get running.

As noted above, Florida used ARPA stabilization funds to collect data and was concerned about sustaining this practice when the funding ends. To address this challenge and ensure continued data availability, Florida added workforce questions to a preexisting periodic survey.

4. Data alignment across systems and partners

Participants discussed how they could build alignment across systems and partners for EC workforce data collection and use. They talked about how federal agencies could support federal-to-state alignment and how states and localities could bring a broader array of EC programs into state/local data collection efforts. In some cases, these were national efforts (e.g., American Rescue Plan Act of 2021), in others these were state or local legislation or policies (e.g., a task force resulting from a governor’s call to action).

USE OF CONSISTENT DEFINITIONS

Participants raised concerns about the differences in terminology to describe EC workforce positions. They noted that the Bureau of Labor Statistics has definitions of EC that do not align with actual positions in the EC workforce. For example, “The EC workforce” can mean many things, as it can refer to publicly funded child care, family/friend/neighbor care, or home-based providers (including licensed family child care or unlicensed or license-exempt providers).

- There is a need for federal alignment across EC workforce definitions so that states can use these definitions in their own data collection processes. Participants noted that a lack of alignment made it difficult to answer questions about their state’s EC workforce in comparison to the rest of the nation and made interpretation of federal reports difficult. A 2016 [brief proposed EC workforce definition](#) changes, but these have not yet been implemented.
- While many participants voiced concern about a lack of definitional alignment, others advocated for multiple, flexible definitions to allow entities to

contribute data for new purposes without losing the value of their own definitions.

DIFFERENT LEVELS OF PARTNERSHIPS

Some participants discussed the need for partnerships. They noted that state-to-state partnerships would be a useful next step to inform their own practice.

Participants also noted that while there is a desire for state alignment, there is a lack of resources to support a convening of states (e.g., lack of state staffing).

SUPPORTING HEAD START PROGRAMS

Participants noted that it could be challenging to connect Head Start sites with state legislatures. In one example, a participant observed that the Head Start Collaboration Director is usually the only person who has contact with state-level decision makers, adding that it is a challenging role given their other responsibilities.

The group suggested that to include Head Start in state-level decision-making, they would need to apply for funding, which is often temporary (i.e., via a grant). Additionally, using grant funding would create a fragmented structure that could vary greatly across programs and likely be unsustainable.

Participants suggested highlighting data that Head Start already collects but is not presented more broadly, which could be shared automatically to reduce burden for Head Start staff.

INCLUDING HOME-BASED CHILD CARE PROVIDERS

Participants discussed the need to increase home-based and family/friend/neighbor care participation in workforce registries.

Participants stated that these providers should participate in EC workforce data use for impact. For example, workforce registries can be used as a broadcast system (e.g., guidance on COVID procedures).

5. Technical assistance (TA), resources, or research needed

In addition to the alignment of EC terms and definitions, states and participants identified two areas where further support would be helpful: technical skill development and peer-to-peer collaboration.

TECHNICAL ASSISTANCE NEEDS

States would like assistance in developing technical skills for data collection, management, and analysis, such as using and presenting findings on workforce data and

workforce data-related resources. For example, participants said they would like technical assistance around the use of modern technology, software programs, real-time data collection, and other data tools; support for public-facing annual workforce data reports and registries; vendor-neutral support; information on real-time data; and information on the limitations of Bureau of Labor Statistics (BLS) workforce data. Participants also spoke about the need to balance sound research methods and accessibility for partners (e.g., ensuring statistical methods are rigorous while not too complex to present to partners).

Participants identified the need for resources related to data quality improvement, including research questions, data dashboards, analyses, data use agreements, and other data products and tools. Participants also said it would be helpful to see research that shows the impact of TA and other resources.

COLLABORATION AND INTEGRATION

Participants emphasized the need for state-to-state collaboration to learn about how other states collect, use, and share EC workforce data. For example, states expressed interest in learning about collaboration between partners towards the use of workforce data, and the need for support in integrating programs outside of the scope of early childhood programs (i.e., public assistance programs). Participants said they needed federal encouragement on the use of state and local staff capacity for partnership building and maintaining and disseminating results. They also said they needed TA on best practices for engaging diverse partners, such as providers, parents, and community organizations.

Table 1 in the Appendix lists areas of needs for assistance from federal agencies.

workforce data could focus on these areas so that states, localities, and tribes can use EC workforce data more effectively to address the EC workforce crisis.

Acknowledgments

The NORC team—Carol Hafford, Marc Hernandez, Isha Padhye, Juliana Rev, and Brooke Rumper—thank the administrators and researchers from the states and localities that participated in the Access and Capacity Panels at the “Data for Impact” Convening, as well as the leadership team from the National Early Care and Education Workforce Center and the research team from the Building and Sustaining the Early Care and Education (BASE) project for their insights. We thank Alayna Schreier, Jess Belledonne, and Philip Steigman of ASPE for their guidance throughout the project.

Next Steps

This brief presents strategies on how states and localities have successfully used workforce data for impact and opportunities for federal agencies to support states, localities, and tribes in this work. States were able to voice TA needs around technical skills, collaboration, and integration to support their effective use of EC workforce data. States recognized the value of building diverse partnerships but need federal encouragement on the use of state and local staff capacity to build and maintain these partnerships. States also expressed they would like further opportunities for state-to-state collaboration. Future opportunities for federal support and TA around EC

Appendix

Table 1. Highlighted Opportunities for Additional Assistance from Federal Agencies

Technical Assistance

- Support in expanding integration of data beyond subsidy or state preschool programs (e.g., public assistance programs).
- Better understanding of modern technology/SaaS, APIs, real-time data collection, etc.
- Support for public-facing annual workforce data reports and registries.
- Incentives to leverage existing registry data.
- Continued connection between states, with the goal of learning from one another.
- Vendor-neutral information. Much of the expertise comes from companies selling a product and services.
- Understanding the limitations of the Bureau of Labor Statistics workforce data (e.g., differences in definitions, numbers).
- Best practices on engaging diverse partners (e.g., a range of providers, parents, community organizations).
- Training on how data-driven decision-making empowers service providers and intermediaries to succeed.
- Strategies to balance rigorous research methods and accessibility for key partners.

Resources

- Examples of research questions, data dashboards, data use agreements, analyses, data file structures, map formats, etc.
- Federal agency (e.g., Office of Child Care) encouragement of use of state/local staff time in partnership building, maintaining, and dissemination of results.
- More information about the use of real-time data (e.g., why it matters, how to collect it)
- Dedicated resources for data quality improvement.

Research

- Benchmarks or tools to assess and improve data quality.
- Documenting the impact of TA and other resources.